

FERNALD CLEANUP PROGRESS BRIEFING

SEPTEMBER 1999

6:30 p.m. Opening Remarks

Gary Stegner

6:35 p.m. Project Updates

Waste Pits Remedial Action Project

Dave Lojek

On-Site Disposal Facility Project

Jay Jalovec

Decontamination & Dismantlement

John Trygier

Silos Project

Nina Akunduz

Aquifer Restoration/Wastewater Project

Rob Janke

Soil Characterization & Excavation Project

Dennis Carr

Waste Management

Carlos Tellez

Question and Answer Session

8:30 p.m. Adjourn

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PROJECT NEWS

WASTE PITS REMEDIAL ACTION PROJECT

- Rail shipments to Envirocare
- Waste pit excavation
- Full-scale treatment operations

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PROJECT NEWS

ON-SITE DISPOSAL FACILITY

- Cell 1: 180,000 in-place cubic yards; 60 percent complete
- Cell 2: 95,000 in-place cubic yards; 25 percent complete
- Cell 3: Liner System installation
- Permanent Leachate Transmission System design

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DEBRIS PLACEMENT

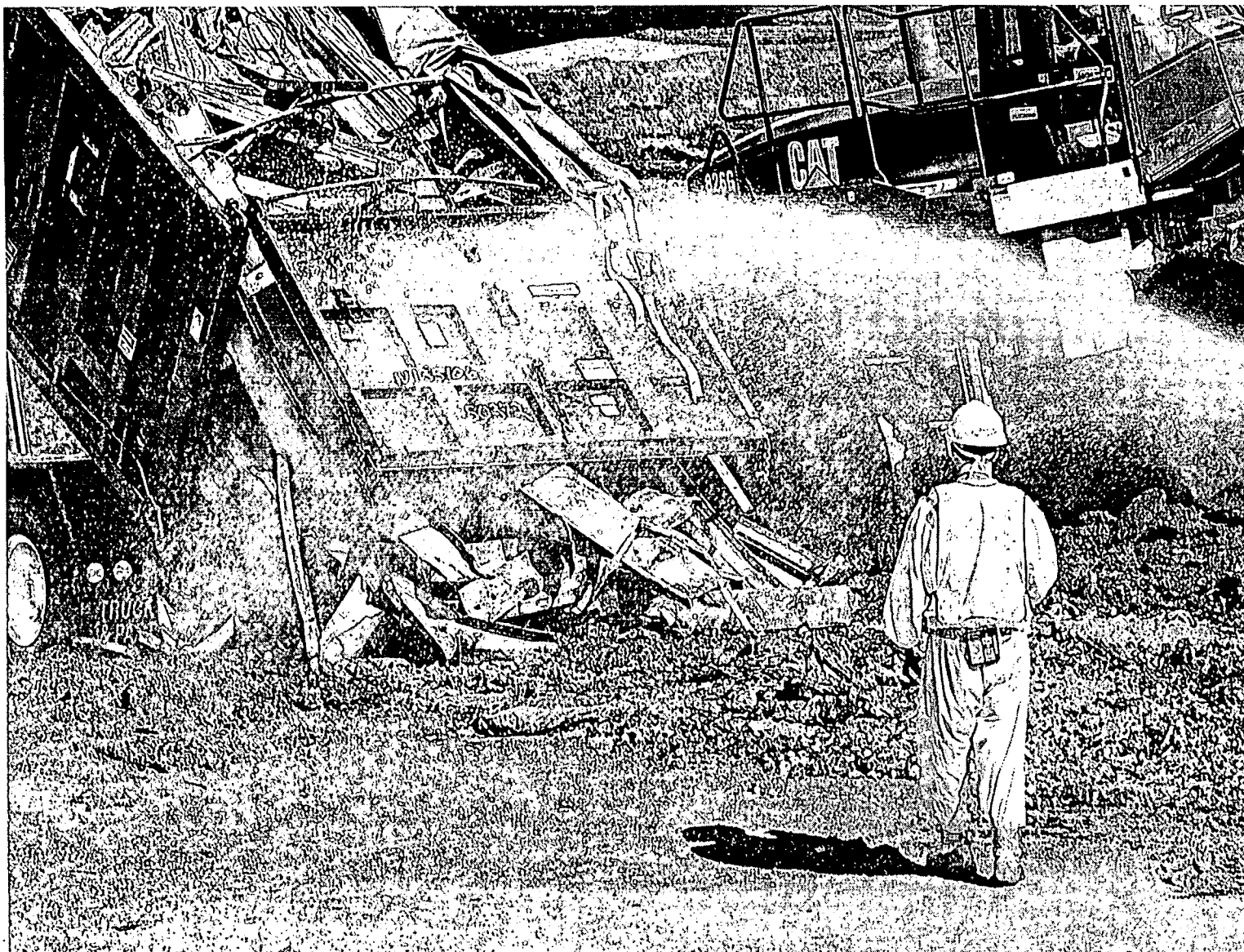


Photo taken June 1999

SOIL PLACEMENT



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Photo taken July 1999

CELL 3 CLAY LINER

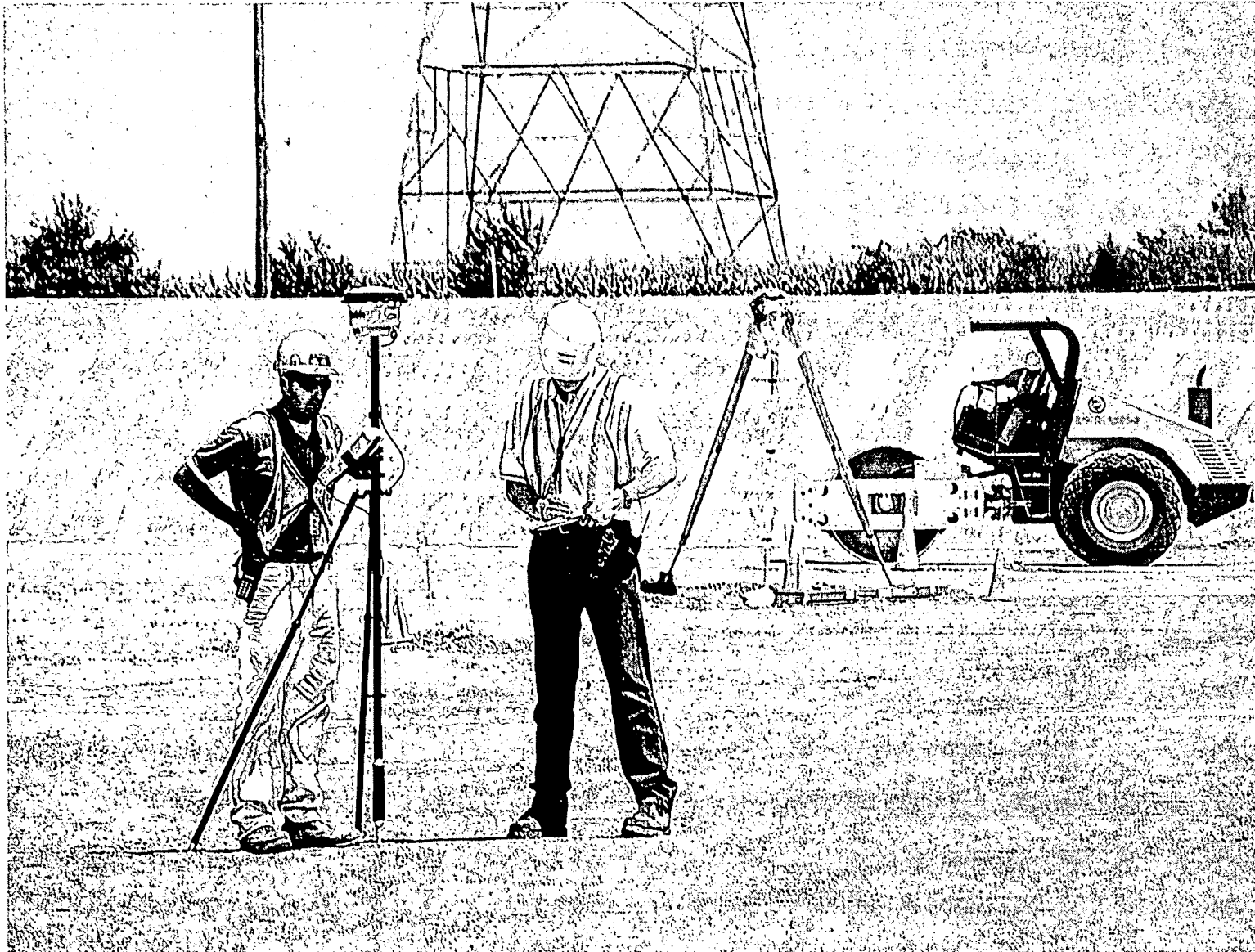


Photo taken August 1999

GEOSYNTHETIC CLAY LINER

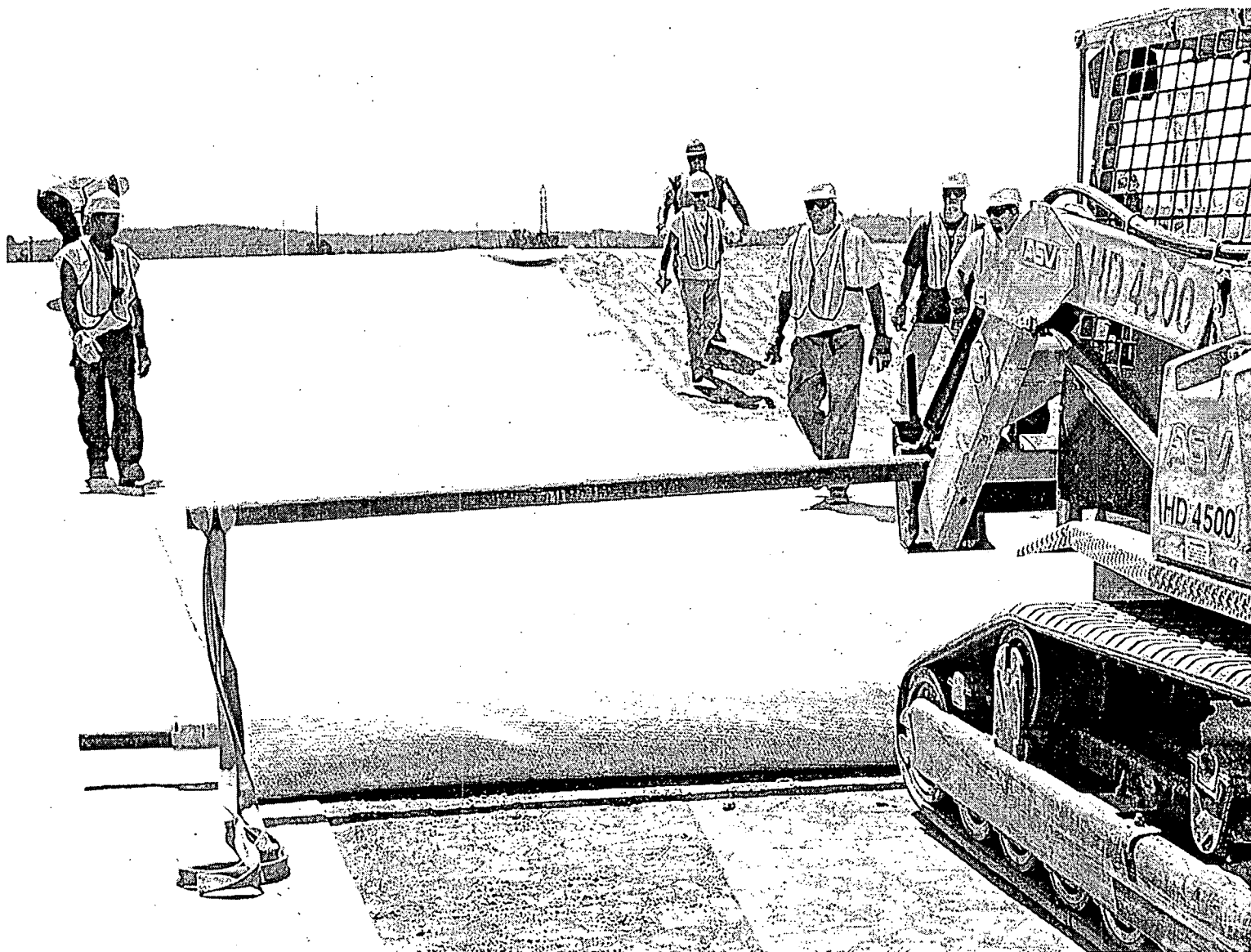


Photo taken August 1999

LEAK DETECTION SYSTEM DRAINAGE LAYER



Photo taken August 1999

PROJECT NEWS DECONTAMINATION & DISMANTLEMENT

- Plant 6 decontamination and dismantlement contract
- Demolition work started on Plant 5
- Status of Maintenance Tank Farm Complex

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PLANT 5 D&D

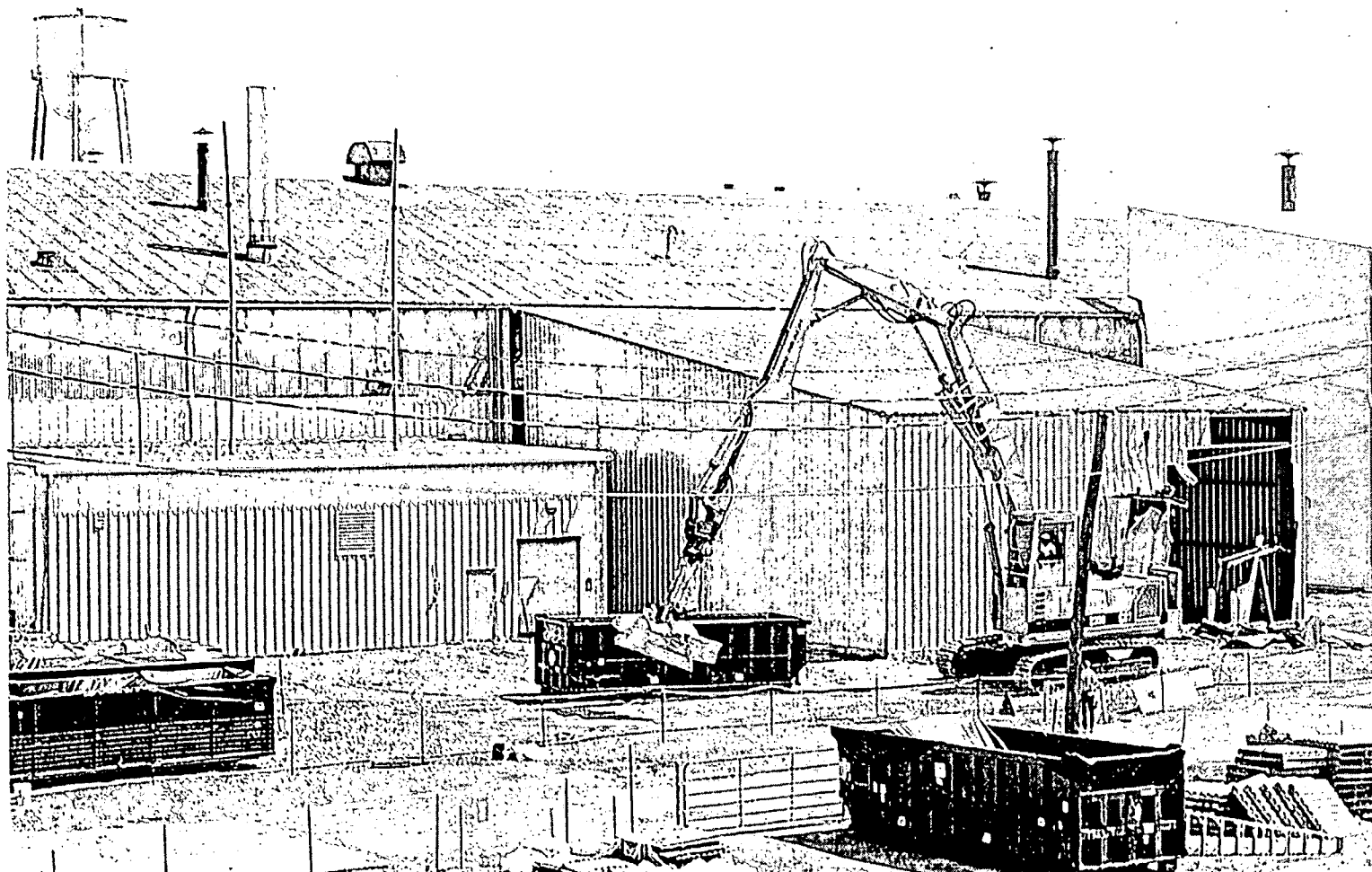
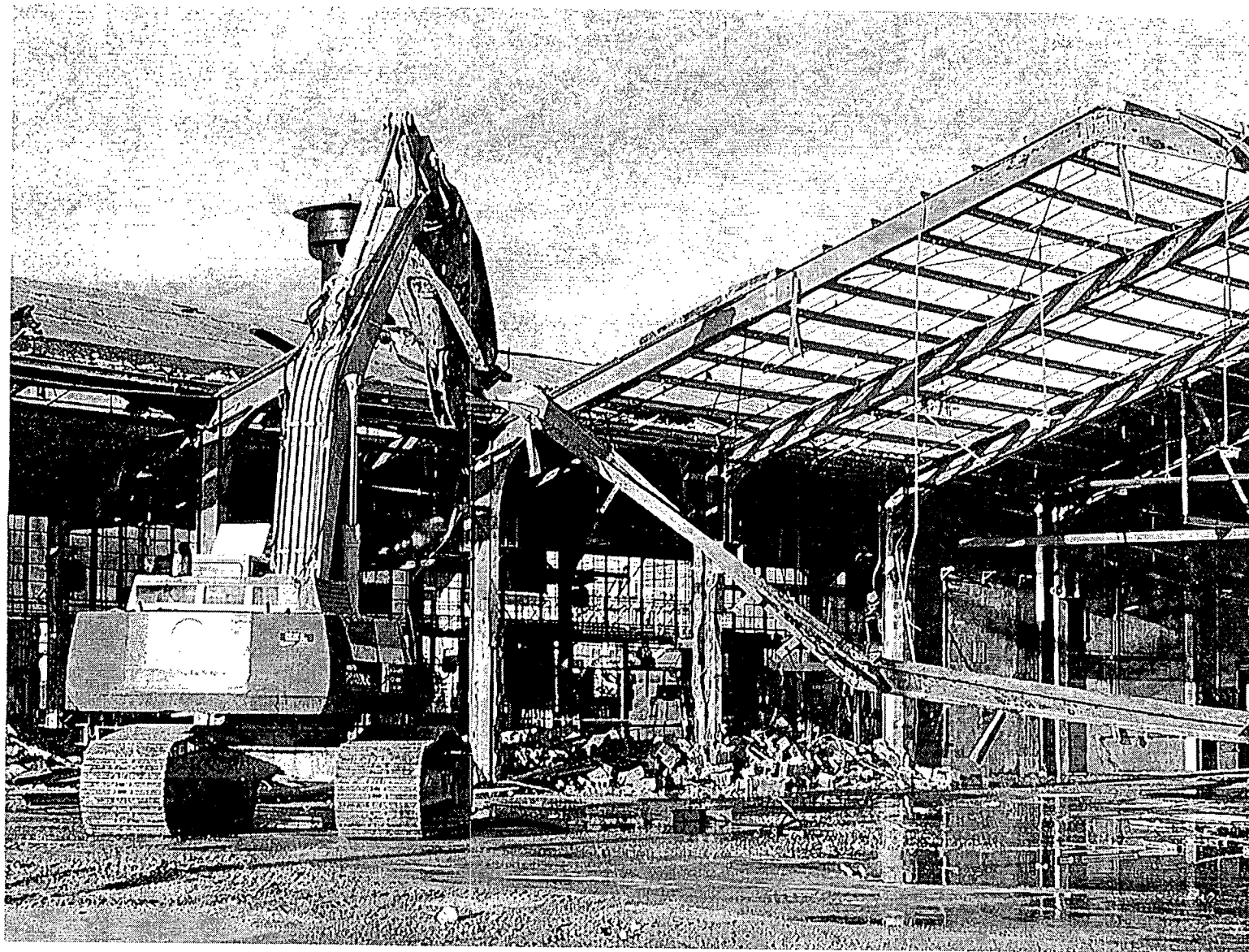


Photo taken August 1999

MAINTENANCE BUILDING



Graphics # 5921.3C 9/99 7118-D130

Photo taken August 1999

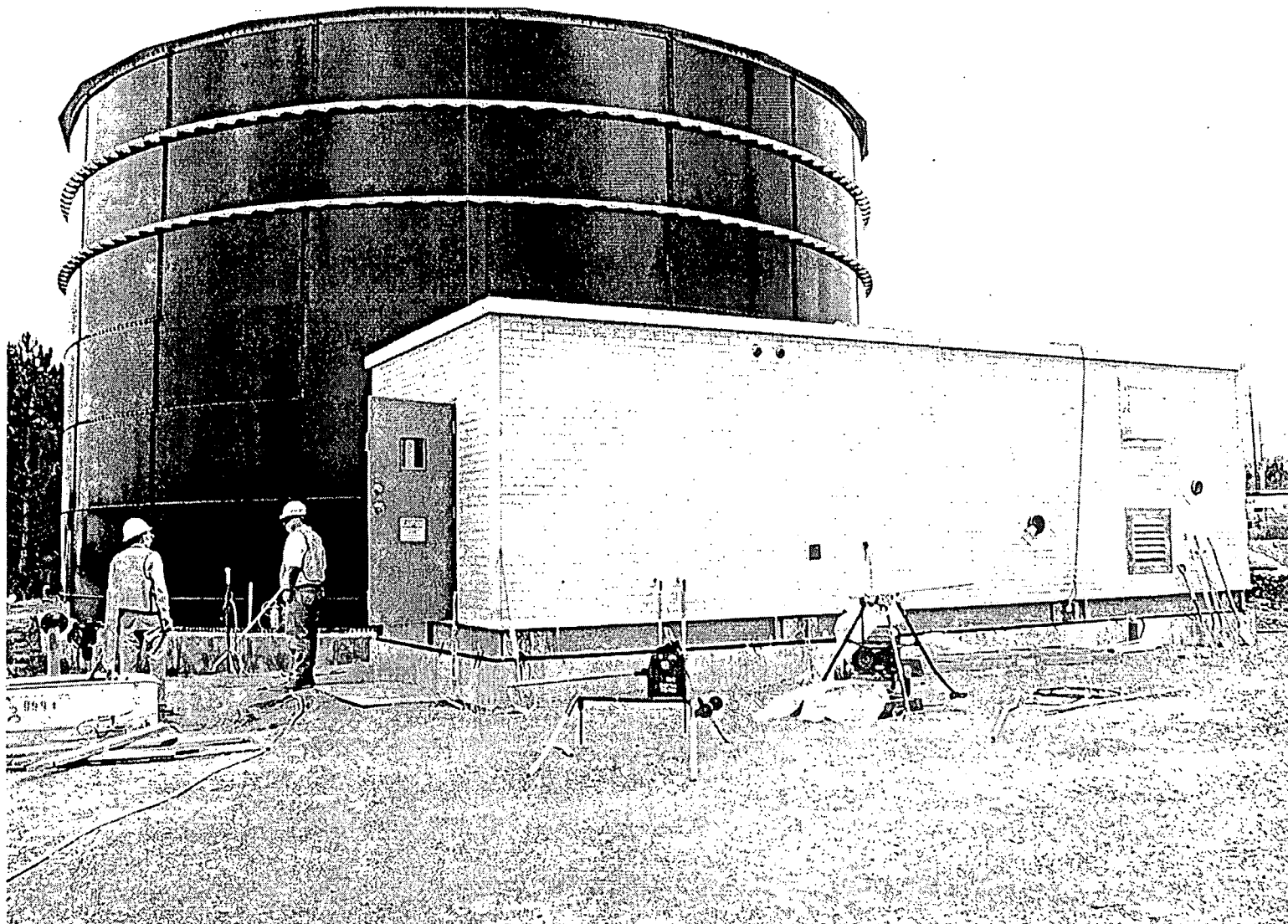
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MISCELLANEOUS SMALL STRUCTURES



Photo taken August 1999

NEW WATER TANK



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PROJECT NEWS

SILOS PROJECT

Silos 1 & 2 Feasibility Study

- Draft Feasibility Study preparation
- Dialogue with stakeholders and regulators
- Independent reviews by Critical Analysis Team (CAT) and DOE review team

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PROJECT NEWS

SILOS PROJECT

Silos 1& 2 Accelerated Waste Retrieval

- Finalized schedule
- Continuing design and safety documentation development
- Authorization to mobilize on target for second quarter, FY 2000

PROJECT NEWS

SILOS PROJECT

Silo 3

- Design and safety documentation development
- Authorization to mobilize on target for fourth quarter, FY 2000

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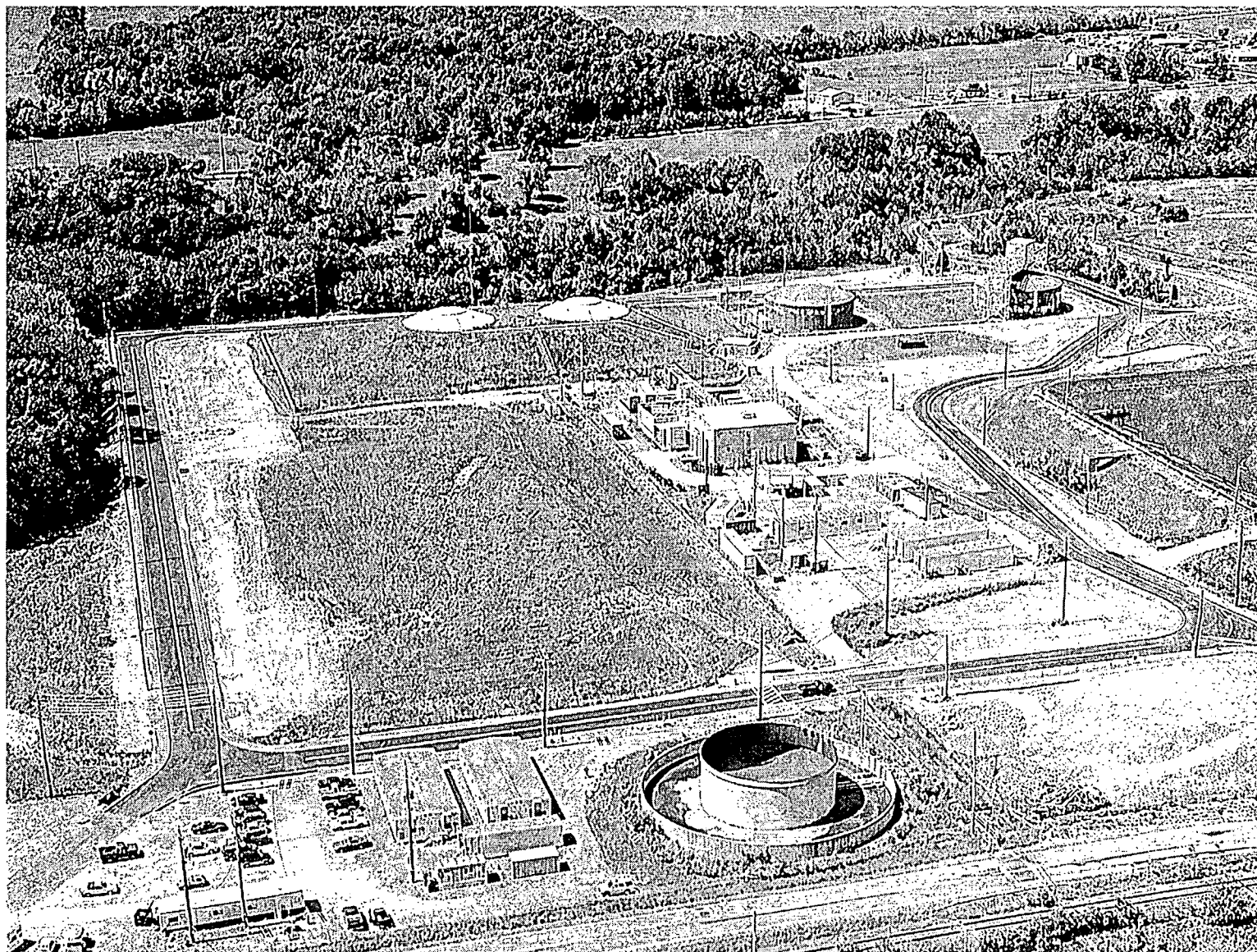
PROJECT NEWS

SILOS PROJECT

Infrastructure Project

- Completed project
- Demobilization expected by mid-September

SILOS INFRASTRUCTURE PROJECT ROAD



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Photo taken August 1999

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PROJECT NEWS

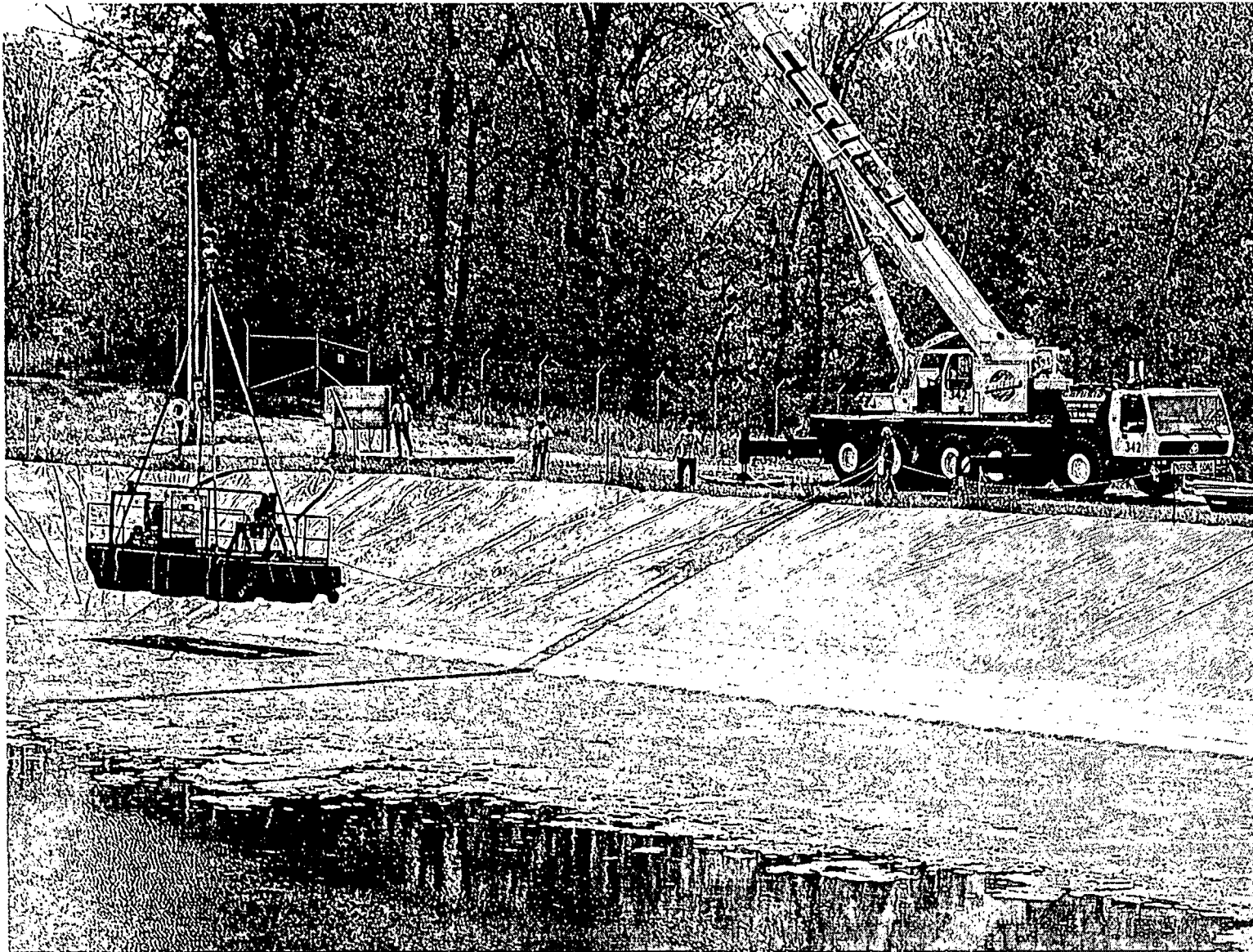
AQUIFER RESTORATION/ WASTEWATER PROJECT

- Construction Projects:

- Sludge Removal System completed August 27
- AWWT laboratory expansion completed September 7
- Installation of two new extraction wells in South Field

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SLUDGE REMOVAL DREDGE



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AWWT LABORATORY EXPANSION

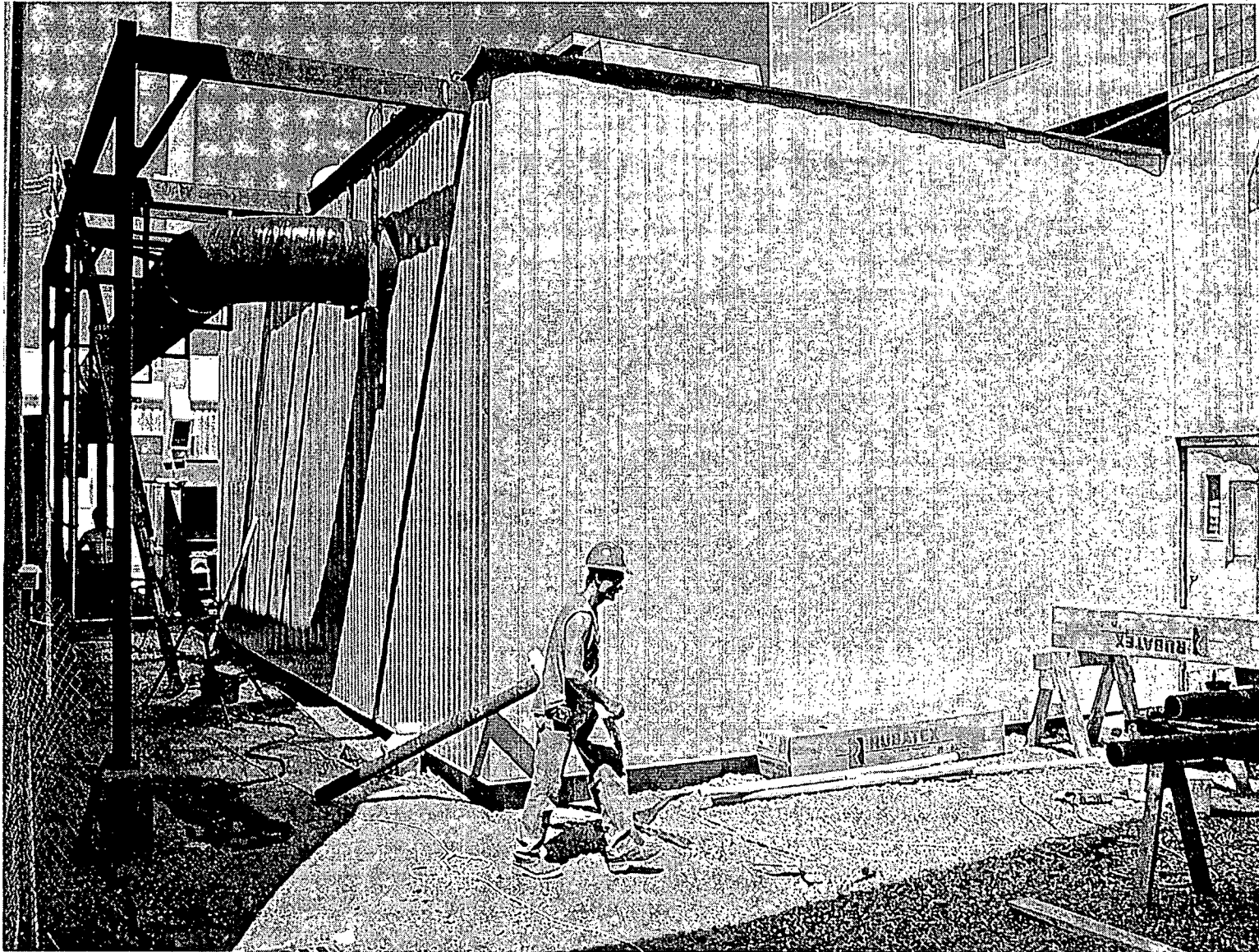


Photo taken August 1999

EXTRACTION WELL INSTALLATION

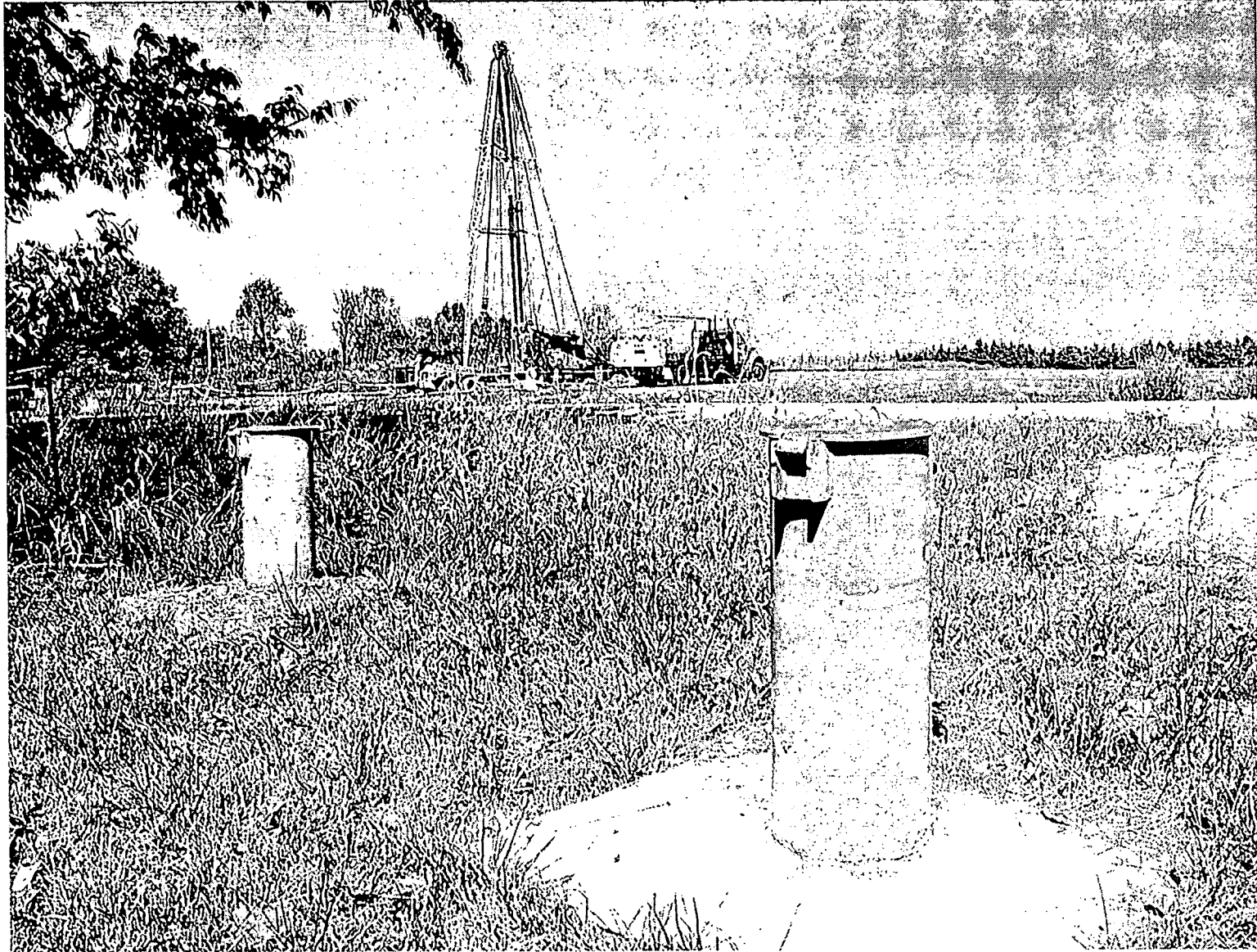


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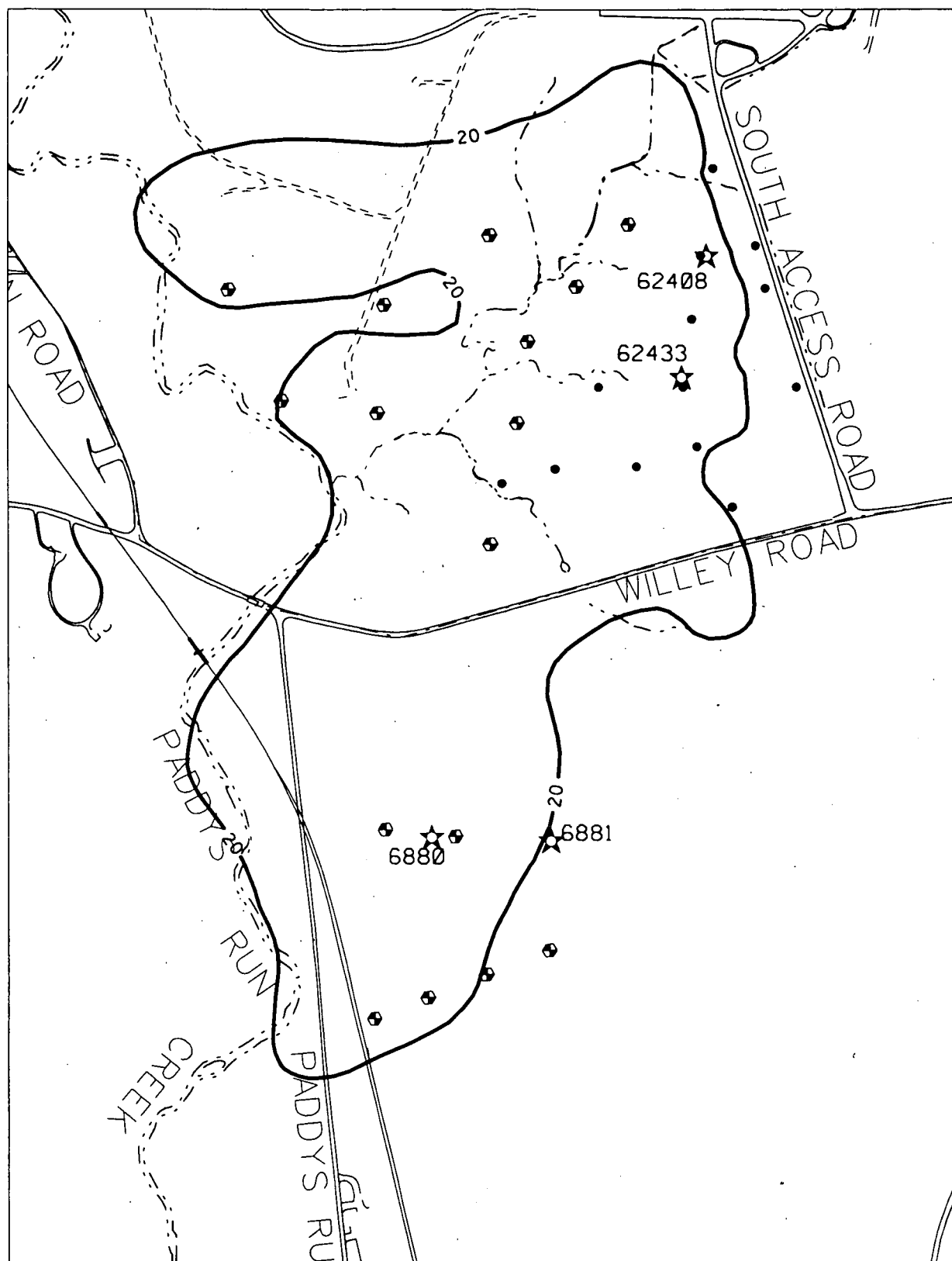
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SOUTH PLUME

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STATE PLANAR COORDINATE SYSTEM 1983

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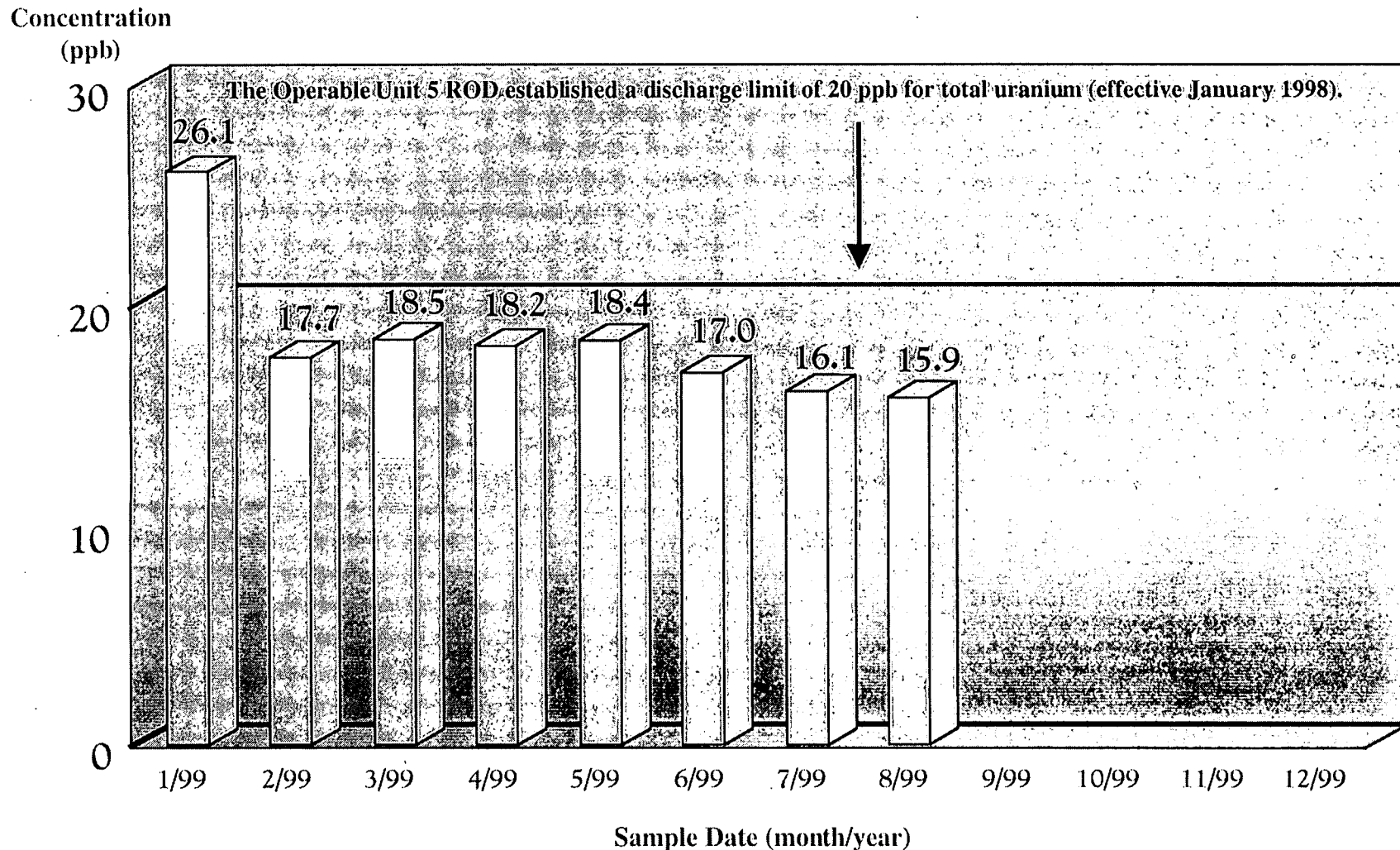


LEGEND:

- GEOPROBE LOCATION
- ⊕ EXTRACTION WELL LOCATION
- ★ NEW MONITORING WELL LOCATION

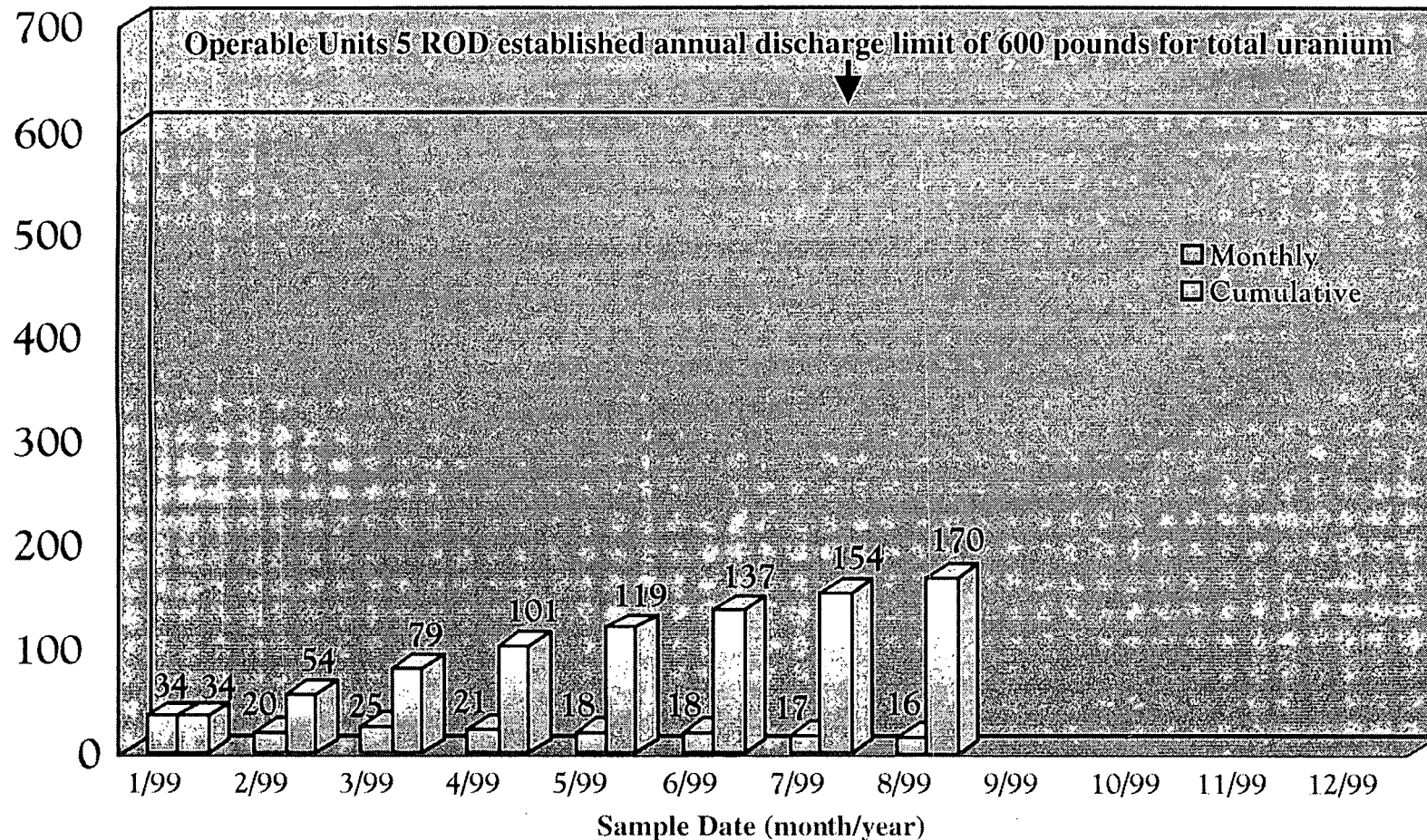
— 20 — TOTAL URANIUM CONTOUR
IN $\mu\text{g/L}$

AVERAGE MONTHLY TOTAL URANIUM CONCENTRATION DISCHARGED TO THE GREAT MIAMI RIVER IN 1999



POUNDS OF URANIUM DISCHARGED TO THE GREAT MIAMI RIVER IN 1999

Weight (pounds)



Note: Sum of monthly discharges may not always agree with cumulative total because of rounding differences.

PROJECT NEWS

SOIL CHARACTERIZATION & EXCAVATION PROJECT

- Excavation activities at old Sewage Treatment Plant and surrounding area
- 3500 cubic yards of soil treated at Trap Range and Firing Range
- Excavation resumed in Southern Waste Units in July
- Area 8 Phase II and Area 6 triangle area (small portion in Morgan Township) certification completed
- Proposed Final Land Use documents available to public

OLD SEWAGE TREATMENT PLANT EXCAVATION



Photo taken August 1999

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OLD SEWAGE TREATMENT PLANT EXCAVATION



Photo taken June 1999

LEAD STABILIZATION (TRAP RANGE)

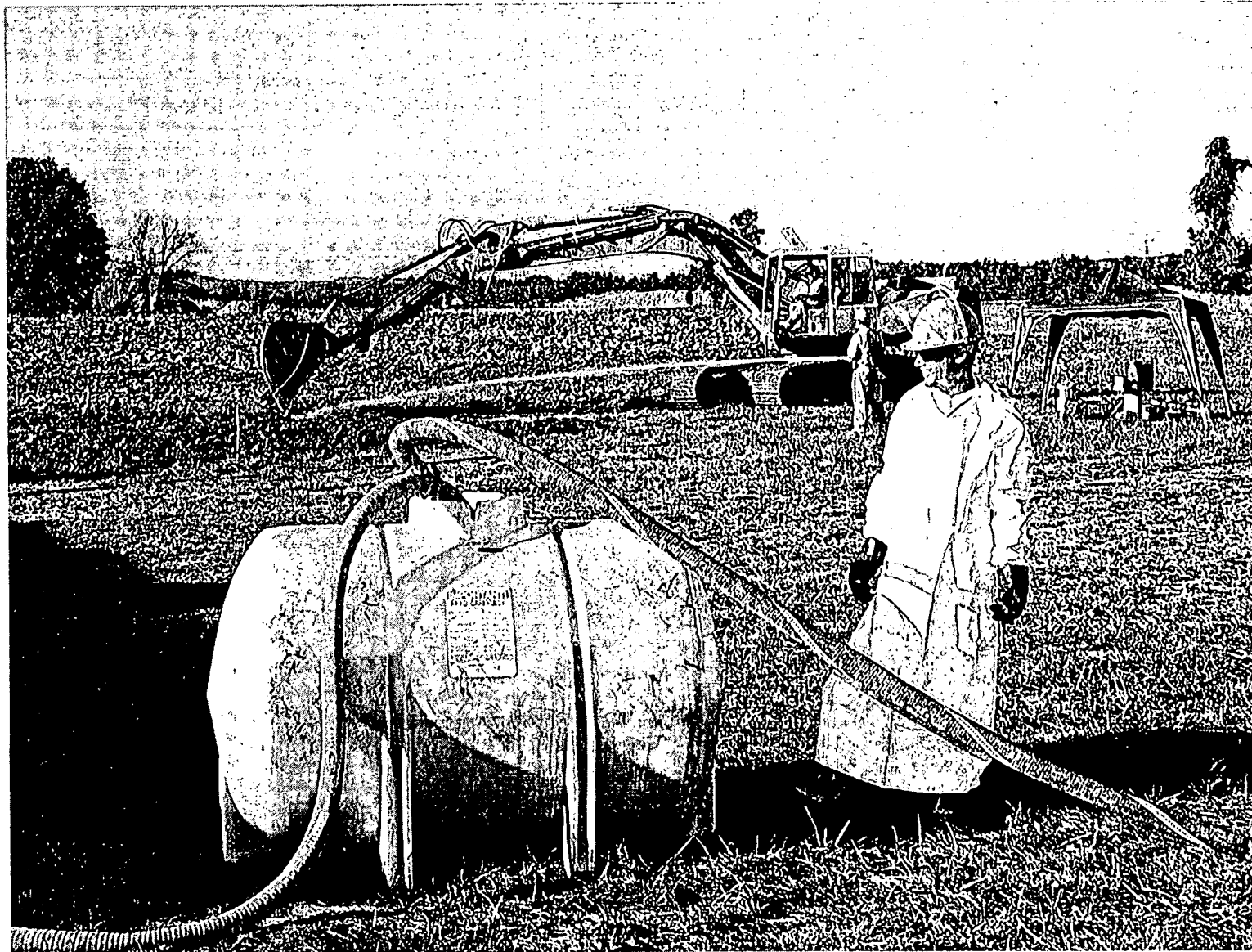


Photo taken August 1999

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LEAD STABILIZATION (FIRING RANGE)

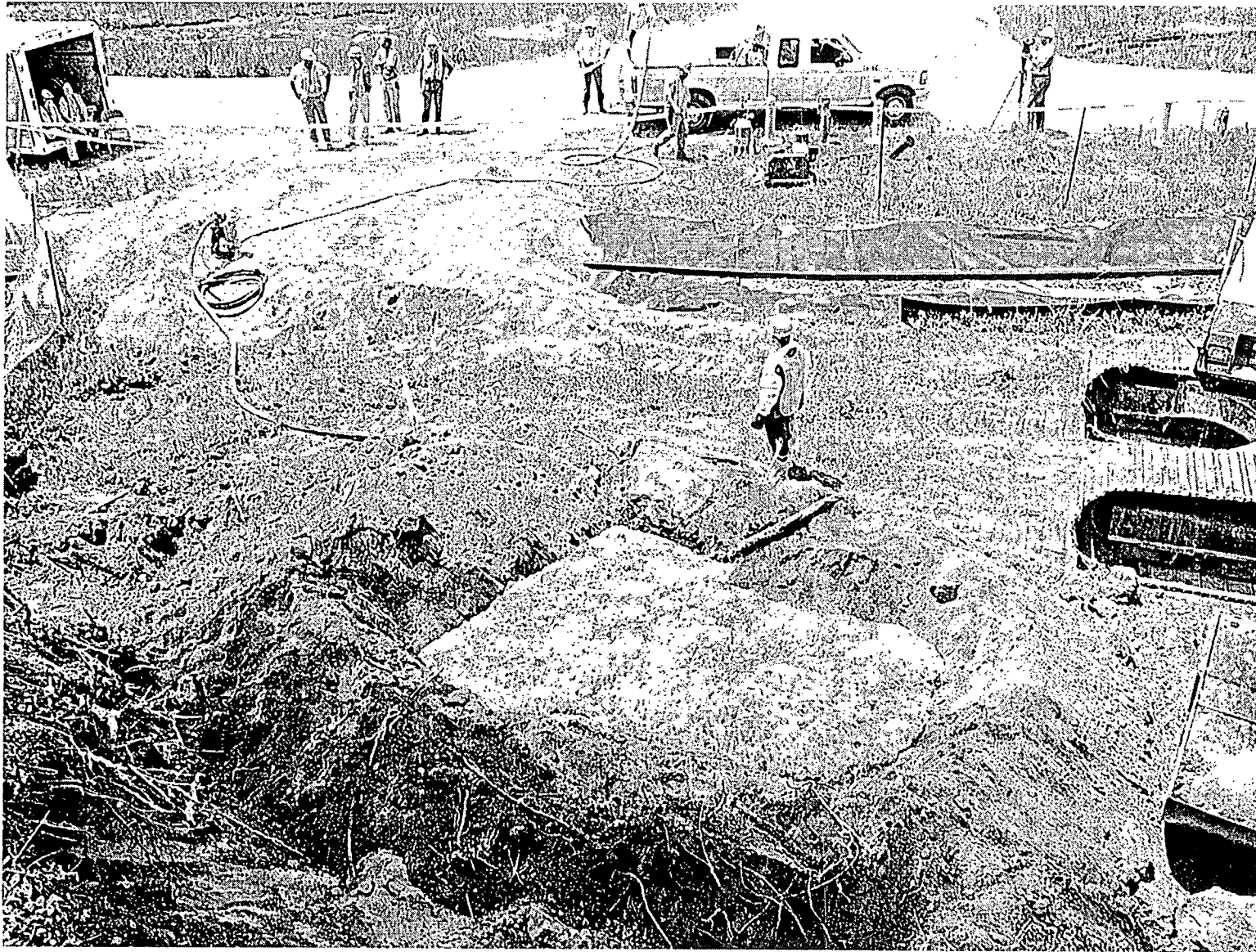


Photo taken July 1999

SOUTHERN WASTE UNITS



Photo taken September 1999

PROJECT NEWS

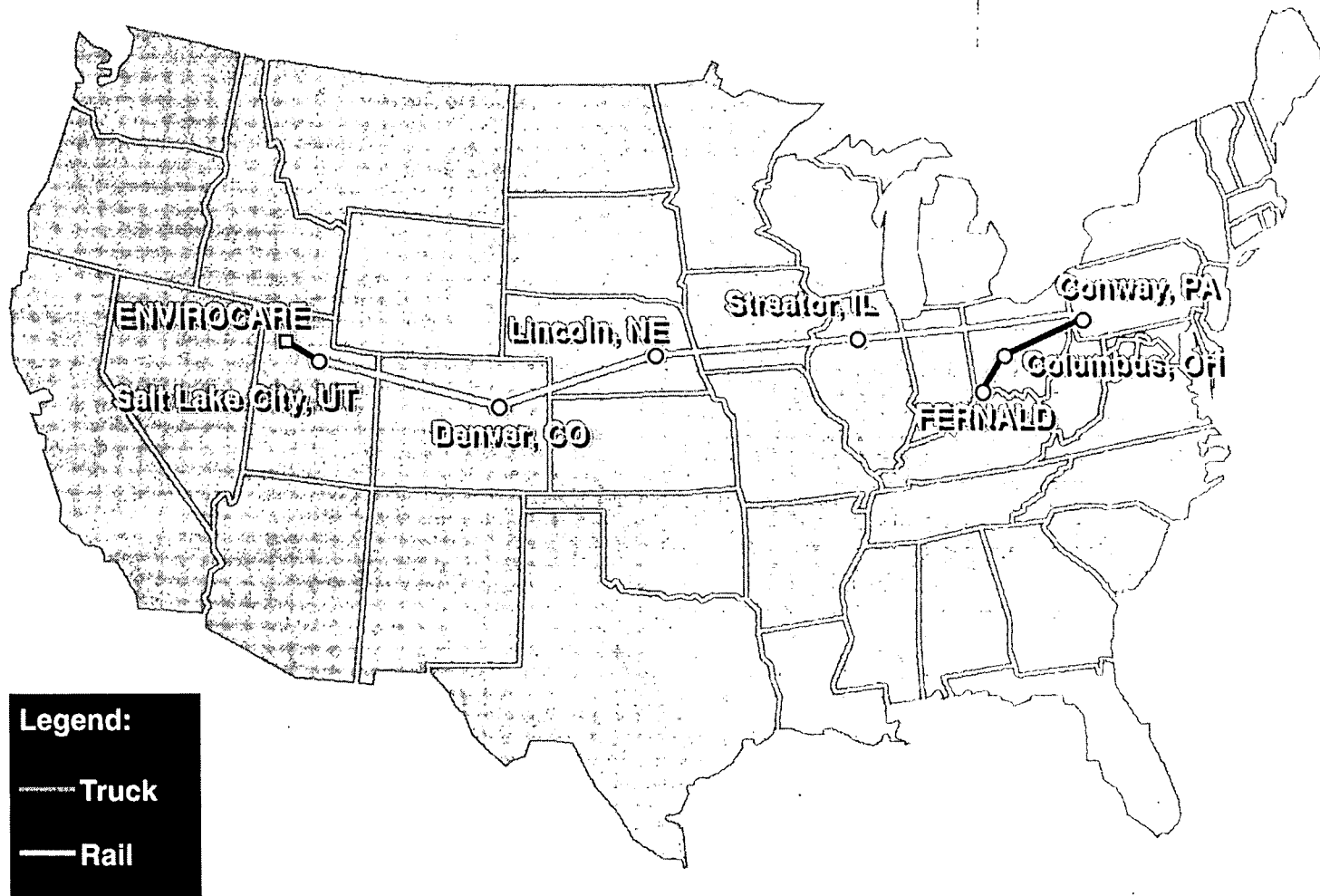
WASTE MANAGEMENT

- Liquid mixed waste shipments
- Emergency response field support
- Nuclear material shipments
- Intermodal mixed waste shipment
- Low-level waste shipments

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INTERMODAL MIXED WASTE SHIPMENT ROUTE



FERNALD CLEANUP STATUS



FLUOR DANIEL
FERNALD

1 - Waste Pit Remediation: shipped 38,567 of 626,000 tons

2 - Silos 1 and 2: 8,800 cu. yds. low-level radioactive residues to be retrieved and placed in temporary tank storage

Silo 3: 5,088 cu. yds. of cold metal oxides, to be removed, treated and shipped for disposal

3 - Aquifer Restoration: 4.8 billion gallons removed from aquifer

4 - On Site Disposal Facility (OSDF): Cell #1 - 60% filled
Cell #2 - 25% filled
Cell #3 - secondary liner being installed

5 - Waste and Material Shipping:

A) Low-Level Radioactive Waste: shipped 34,084 cu. ft of 3.4 million cu. ft.

B) Nuclear Material: shipped 2.1 million net lbs. of 9.8 million net lbs.

C) Liquid Mixed Waste: shipped 160,000 gallons of 270,000 projected total gallons

6 - Soil Characterization and Excavation: moved 750,000 cu. yds. of soil

61 of 200 buildings removed

